Appl. No. 10/643,155

Amdt. dated November 3, 2005

Reply to Office Action of May 3, 2005

REMARKS/ARGUMENTS

Claims 1-32 were pending. This Amendment amends claims 1, 14 and 16 and cancels claim 15; no claims are added. Thus, claims 1-14 and 16-32 will remain pending.

In the Office Action, the Examiner rejected claims 1-3, 5, 7, 14-19 under 35 USC §103(a) as being unpatentable over Ghosh (US Patent Publication No. 2003/0152176) in view of Strolle et al. (US Patent No. 6,560,299) and Webster et al. (US Patent No. 6,233,273). The Examiner also rejected, under 35 USC §103(a), claim 4 as being unpatentable over those three references, claim 6 as being unpatentable over those three references and further in view of Allpress et al. (US Patent Publication No. 2002/0131488), and claims 8-13 and 20-26 as being unpatentable over those three references and further in view of Halford et al. (US Patent No. 6,614,836). Applicant respectfully traverses the rejections and requests reconsideration and withdrawal of the rejections in view of the amendments and arguments herein.

Applicant notes with appreciation the allowance of claims 27-32.

Claim 1

Claim 1, as amended, is allowable over the cited references. Claim 1 was amended to clarify a limitation that was arguably already present in the claim, so it is not intended to surrender any scope. Claim 1 is directed to a wireless receiver having a plurality of antennas having signal diversity, demodulation logic that demodulates signals from two or more of the antennas, and distortion compensation that processes at least a portion of those signals comprising portions from signals from at least two of the plurality of antennas. Applicant submits that such limitations are not disclosed or suggested in the cited references, taken alone or in a combination that would be suggested by the combination of the references.

Ghosh does not disclose a plurality of antennas, as the Examiner concedes, and thus also does not teach processing signals from more than one antenna. Strolle discloses the use of more than one antenna and joint signal processing prior to a combiner, but does not disclose demodulation of either Barker modulated signals or CCK signals. Applicant submits that it is not at all obvious to go from Ghosh and Strolle to demodulation logic that demodulates a set of signals from two or more of the plurality of antennas, including one or more of a Barker

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correlator and a CCK correlator corresponding to modulation of the set of signals. Webster also fails to disclose demodulation logic that demodulates a set of signals from two or more of the plurality of antennas, including one or more of a Barker correlator and a CCK correlator corresponding to modulation of the set of signals. Therefore, claim 1 should be allowable over those references.

Claims 2-13

Claims 2-13 should be allowable for at least the reasons cited above with respect to claim 1.

Claim 14

Claim 14 is also allowable over the cited references. Claim 14 has been amended to clarify that the whitened matched filter receives signals from two or more input signals and outputs at least one combined filtered signal with contribution from the two or more input signals. The cited references, alone or in combination do not disclose or suggest this.

Ghosh and Webster are directed to single antenna processing. While Strolle does show two antennas, it does not disclose the claimed whitened matched filter. Strolle does show some filtering at each of a plurality of receive chains, but that does not suggest the claimed filter.

Applicant notes that in the Examiner's rejection of claim 15, the Examiner cites to Fig. 3 of Ghosh (r_k , specifically) as disclosing a received signal representative of more than one input signal. Ghosh does not appear to suggest that the input to forward filter 12' in Fig. 3 is different than the input to forward filter 12 in Fig. 1, which is clearly a single antenna input. If this is not the case, the Examiner is invited to point out contrary support in Ghosh. Assuming that is the case, however, the elements of claim 15 that are incorporated into claim 14.

Claims 16-26

Claims 16-26 should be allowable for at least the reasons cited above with respect to claim 14.

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CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

espectfully submitted,

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